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TECH CENTER 1600/2900

SEQUENCE LISTING

MS
<110> Lipson, David A
Wagner, Richard W
Kuimelis, Robert G

<120> PROTEIN SCAFFOLDS FOR ANTIBODY MIMICS
AND OTHER BINDING PROTEINS

<130> 50036/021004

<140> US 09/688,566

<141> 2000-10-16

<150> US 60/111,737

<151> 1998-12-10

<150> US 09/456,693

<151> 1999-12-09

<150> US 09/515,260

<151> 2000-02-29

<160> 202

<170> FastSEQ for Windows Version 4.0

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<212> DNA

<213> Homo sapiens

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ggaattccta atacgactca ctatagggac aattactatt tacaattaca atgcatcacc	60
atcaccatca cgtttctgat gttccgaggg acctggaagt tggtgctgcg acccccacca	120
gc	122

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<212> DNA

<213> Homo sapiens

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ggaattccta atacgactca ctatagggac aattactatt tacaattaca atggtttctg	60
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<211> 126

<212> DNA

<213> Homo sapiens

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<223> n = A,T,C or G

<221> misc_feature

<222> (1)...(126)

<223> s = C or G

<221> misc_feature

<222> 74, 75, 77, 78, 80, 81, 83, 84, 86, 87, 89, 90, 92, 93

<223> n = A,T,C or G

<400> 3

agcggatgcc ttgtcgtcgt cgtccttgta gtcgctcttc cctgtttctc cgtaagtgat 60
cctgtaatat ctsnnsnnsn nsnnnsnnnn snccagctg atcagtaggc tggtaggggt 120
cgcagc 126

<210> 4

<211> 62

<212> DNA

<213> Homo sapiens

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cc 62

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<211> 99

<212> DNA

<213> Homo sapiens

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atcaccatca cctcttcaca ggaggaaata gccctgtcc 99

<210> 6

<211> 132

<212> DNA

<213> Homo sapiens

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<221> misc_feature

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<222> (1)...(132)

<223> s = C or G

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<222> 83, 84, 86, 87, 89, 90, 92, 93

<223> n = A,T,C or G

<400> 6

agcggatgcc ttgtcgtcgt cgtccttgta gtcgctcttc gtataatcaa ctccagggtt 60
aaggccgctg atggtagctg tsnnnsnnnn snnaggcaca gtgaactcct ggacagggtt 120
atttcctcct gt 132

<210> 7

<211> 64

<212> DNA

<213> Homo sapiens

<400> 7

agcggatgcc ttgtcgtcgt cgtccttgta gtcgctcttc gtataatcaa ctccaggttt 60
aagg 64

<210> 8
<211> 101
<212> DNA
<213> Homo sapiens

<400> 8
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atcaccatca cctcttctat accatcactg tgtatgctgt c 101

<210> 9
<211> 114
<212> DNA
<213> Homo sapiens

<220>
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<223> s = C or G

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81, 83, 84, 86, 87
<223> n = A,T,C or G

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agcggatgcc ttgtcgtcgt cgtccttgta gtctgttcgg taattaatgg aaattggsnn 60
snnnsnnns nnsnnnsnn nsnnnsnagt gacagcatat acagtgatgg tata 114

<210> 10
<211> 57
<212> DNA
<213> Homo sapiens

<400> 10
agcggatgcc ttgtcgtcgt cgtccttgta gtctgttcgg taattaatgg aaattgg 57

<210> 11
<211> 45
<212> DNA
<213> T7 phage and tobacco mosaic virus

<400> 11
gcgtaatacg actcactata gggacaatta ctatttacia ttaca 45

<210> 12
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Flag sequence

<400> 12
 agcggatgcc ttgtcgtcgt cgtccttgta gtc 33

 <210> 13
 <211> 19
 <212> DNA
 <213> Artificial Sequence

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 <223> Splint oligonucleotide

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 <223> n = A,T,C or G

 <221> misc_feature
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 <223> n = A,T,C or G

 <400> 13
 tttttttttt agcggatgc 19

 <210> 14
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Puromycin linker oligonucleotide

 <400> 14
 aaaaaaaaaa aaaaaaaccc 20

 <210> 15
 <211> 30
 <212> DNA
 <213> Mus musculus

 <400> 15
 gcggcagggt ttgcttactg gggccaaggg 30

 <210> 16
 <211> 27
 <212> DNA
 <213> Mus musculus

 <400> 16
 gggaggggtg gaggtaggtc acagtcc 27

 <210> 17
 <211> 30
 <212> DNA
 <213> Mus musculus

 <400> 17
 tttgctagct ttaccaggag agtgggaggc 30

 <210> 18
 <211> 33

<212> DNA
 <213> Mus musculus

 <400> 18
 aaaaagcttg ccaaaacgac acccccatct gtc 33

 <210> 19
 <211> 33
 <212> DNA
 <213> Mus musculus

 <400> 19
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 <210> 20
 <211> 43
 <212> DNA
 <213> Mus musculus

 <400> 20
 catatgcatt accatcacca tcacgtttct gatattccga gag 43

 <210> 21
 <211> 30
 <212> DNA
 <213> Mus musculus

 <400> 21
 gaattcctat gttttataat tgatggaaac 30

 <210> 22
 <211> 19
 <212> DNA
 <213> Homo sapiens

 <400> 22
 tgtaaatagt aattgtccc 19

 <210> 23
 <211> 20
 <212> DNA
 <213> Homo sapiens

 <400> 23
 tttttttttt tttttttttt 20

 <210> 24
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide

 <400> 24
 cctgtagtg tccat 15

 <210> 25
 <211> 16

<212> DNA
 <213> Homo sapiens

 <400> 25
 catcgtcctt gtagtc 16

 <210> 26
 <211> 13
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide

 <400> 26
 cgtcgtaggg gta 13

 <210> 27
 <211> 17
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide

 <400> 27
 caggtcttct tcagaga 17

 <210> 28
 <211> 24
 <212> DNA
 <213> Homo sapiens

 <400> 28
 catatggttt ctgatgttcc gagg 24

 <210> 29
 <211> 32
 <212> DNA
 <213> Homo sapiens

 <400> 29
 gaattcctat gttcggtaat taatggaaat tg 32

 <210> 30
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> DNA splint Oligonucleotide

 <221> misc_feature
 <222> 10
 <223> n = A,T,C or G

 <400> 30
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<210> 31
 <211> 7
 <212> PRT
 <213> Homo sapien

<400> 31
 Asn Arg Ser Gly Leu Gln Ser
 1 5

<210> 32
 <211> 10
 <212> PRT
 <213> Homo sapien

<400> 32
 Ala Gln Thr Gly His His Leu His Asp Lys
 1 5 10

<210> 33
 <211> 94
 <212> PRT
 <213> Homo sapien

<400> 33
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg Gly Asp
 65 70 75 80
 Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 34
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 34
 Val Ser Glu Ile Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Phe Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Leu Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Asn Thr Ile Thr Gly Tyr Ala Val Thr Thr Thr Tyr
 65 70 75 80
 Arg Thr Arg Ile Asp Lys Gln Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90 95

<210> 35
 <211> 90
 <212> PRT
 <213> Homo sapien

<400> 35
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Lys Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Glu Leu Asn Pro Thr Ala Thr Ile Ser Arg Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gln Asn Gly Thr
 65 70 75 80
 Pro Arg Arg His Leu Arg Pro Asn Phe His
 85 90

<210> 36
 <211> 95
 <212> PRT
 <213> Homo sapien

<400> 36
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Gly Leu Leu Ile Ser Trp Asn Lys Ser Arg Met Thr Thr Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Val Thr Asp Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Asn Thr Ile Ile Val His Ala Val Thr Leu Thr Asn
 65 70 75 80
 Gln Asn Ser Asp His Thr Tyr Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90 95

<210> 37
 <211> 91
 <212> PRT
 <213> Homo sapien

<400> 37
 Val Ser Asp Val Pro Arg Asp Leu Asp Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asp Ser Ser His Arg Tyr Tyr Arg Ile Thr
 20 25 30
 Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe Thr Ala Pro
 35 40 45
 Asn Asn Pro Pro Thr Ala Thr Ile Ser Gly Leu Lys Pro Gly Val Asp
 50 55 60
 Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Asp Gly Ser Arg His Met
 65 70 75 80
 Leu Thr Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 38
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 38
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp His Asn Asn His Ile Asp Met Arg Tyr Tyr
 20 25 30
 Arg Ser Ala Asn Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Val Phe
 35 40 45
 Thr Val Pro Gln Arg Arg Gln Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Lys Asn Gln
 65 70 75 80
 Gly Arg Arg Arg Gln Gly Ile Arg
 85

<210> 39
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 39
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Ser Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Arg Thr Pro Ala Ser Pro His Gly Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Glu Glu Phe
 35 40 45
 Thr Val Pro Leu Leu Trp Pro Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Thr His Met
 65 70 75 80
 Leu Lys Pro Gln Ser Met Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 40
 <211> 94
 <212> PRT
 <213> Homo sapien

<400> 40
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Arg Thr Pro Ala Ser Pro His Gly Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Glu Glu Phe
 35 40 45
 Thr Val Pro Leu Leu Trp Pro Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Thr His Met
 65 70 75 80
 Leu Lys Pro Gln Ser Met Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 41
 <211> 94
 <212> PRT
 <213> Homo sapien

<400> 41
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Ala Ser Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Arg Pro Asn Pro Arg Leu Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Leu Phe Ser Thr Ala Thr Ile Ser Gly Leu Asn Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Lys Glu Thr
 65 70 75 80
 Ser Asn Ile Phe Ile Ala Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 42
 <211> 94
 <212> PRT
 <213> Homo sapien

<400> 42
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Ser Thr
 1 5 10 15
 Cys Leu Leu Ile Ser Trp Arg Pro Asn Pro Arg Leu Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Leu Phe Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Lys Glu Thr
 65 70 75 80
 Ser Asn Ile Phe Ile Ala Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 43
 <211> 94
 <212> PRT
 <213> Homo sapien

<400> 43
 Val Ser Asp Val Pro Arg Asp Pro Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asp Pro Asn Ile Arg Leu Arg Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Phe Phe Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Ser Arg Asn
 65 70 75 80
 Glu Asp Thr Arg Phe Gly Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 44
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 44
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Phe Arg Ser Leu Gln Arg Asp Arg Asp Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Phe Arg Met Lys Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Ile Thr Pro Pro Asp Lys
 65 70 75 80
 Met Glu Pro Pro Lys Gly Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 45
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 45
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Tyr Arg His Thr Tyr Arg Asp Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Ser
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Ala Val Tyr Ala Val Thr Asp Thr Gly Tyr
 65 70 75 80
 Asp Val His Thr Lys Arg Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 46
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 46
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Ala Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Tyr Arg His Thr Tyr Arg Asp Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Ala Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Ala Ile Ala Val Tyr Ala Val Thr Asp Thr Gly Tyr
 65 70 75 80
 Asp Val His Thr Lys Arg Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 47
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 47
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Gln Leu Ile Ser Trp Pro Phe Gly Trp Tyr Pro Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Arg Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Asp Tyr Ser Asp
 65 70 75 80
 Phe Ser Gln Val His Thr Pro Asn Ser Ile Asn Tyr Arg Thr
 85 90

<210> 48
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 48
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Arg Pro Gly Arg Thr Tyr Ser Arg Tyr Arg
 20 25 30
 Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe Thr
 35 40 45
 Val Pro Pro Trp Ala Asn Thr Ala Thr Ile Ser Gly Leu Lys Pro Gly
 50 55 60
 Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Leu Pro Ile Pro
 65 70 75 80
 Thr Leu Val His Gly Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 49
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 49
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Ala Ser Pro Met Trp Cys Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Gly Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Glu Tyr Leu Pro
 65 70 75 80
 Glu Trp Asn Met Thr Gln Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 50
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 50
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Ala Ser Pro Pro Met Trp Cys Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Met Tyr Ala Val Thr Glu Tyr Leu Pro
 65 70 75 80
 Glu Trp Asn Met Thr Gln Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 51
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 51
 Asn Thr Thr His Tyr Arg Lys Asn Asn Tyr Tyr Ala Thr Pro Thr Ser
 1 5 10 15
 Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr Arg
 20 25 30
 Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe Thr
 35 40 45
 Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro Gly
 50 55 60
 Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Asp Lys Ser Asp Thr
 65 70 75 80
 Tyr Lys Tyr Asp Asp Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 52
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 52
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ser Ala Thr Arg
 65 70 75 80
 Thr Val Lys Arg Asp Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 53
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 53
 Val Ser Asp Ala Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Met Tyr Ala Val Thr Ser Asn Val Gly
 65 70 75 80
 Arg Leu Asp Thr Arg Tyr Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 54
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 54
 Val Ser Asp Val Pro Arg Asp Leu Asp Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Glu Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ser Asn Val Gly
 65 70 75 80
 Arg Leu Asp Thr Arg Tyr Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 55
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 55
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Lys Glu Pro Gln
 65 70 75 80
 Arg His Ala Leu Val Thr Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 56
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 56
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Glu Thr Pro Ser
 65 70 75 80
 Thr Lys Pro His Asn Val Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 57
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 57
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn His Pro Gly Pro Phe Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Arg Thr Ala Ile Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala
 65 70

<210> 58
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 58
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Thr Ser
 1 5 10 15
 Leu Leu Ile Ser Trp Asp Tyr Asn Arg Thr Gly Asp Arg Tyr Tyr Arg
 20 25 30
 Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe Thr
 35 40 45
 Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Gly Gly Leu Lys Pro Gly
 50 55 60
 Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly His
 65 70 75 80
 His Leu His Asp Lys Pro Ile Ser Ile Asn Tyr Arg Ser
 85 90

<210> 59

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 59
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Ser Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp His Tyr Leu Arg Arg Gln Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly
 65 70 75 80
 His His Leu His Asp Glu Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 60
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 60
 Val Ser Asp Val Pro Arg Asp Leu Gln Ile Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asp Ile Ser Arg Tyr Lys His Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asp Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Ala Pro Pro Trp Ala Ser Ile Ala Thr Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly
 65 70 75 80
 His His Leu His Asp Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 61
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 61
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Arg Pro Thr Ser Asn Pro Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Thr Ile Gly Gly Leu Lys Pro Gly
 50 55 60
 Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly His
 65 70 75 80
 His Leu His Asp Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 62
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 62
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Cys Trp Arg Pro Thr Ser Asn Pro Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly
 65 70 75 80
 His His Leu His Asp Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 63
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 63
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Arg Pro Thr Ser Asn Pro Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Ser Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ala Gln Thr Gly
 65 70 75 80
 His His Leu His Asp Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 64
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 64
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Gln Leu Ile Ser Trp Lys Thr Thr Asn Pro Thr Ala Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Asn Leu Thr Thr
 65 70 75 80
 Arg Arg Arg His Arg Ala Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 65
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 65
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Thr Thr Arg His Ser Pro Val Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Ile Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Met Pro Thr Asn
 65 70 75 80
 Trp Arg Phe Pro His Arg Pro Ile Ser Ile Asp Tyr Arg Thr
 85 90

<210> 66
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 66
 Val Ser Asp Val Pro Arg Asp Leu Glu Ala Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Arg Glu Arg Glu Arg Arg Tyr Tyr Arg Ile Thr Tyr
 20 25 30
 Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe Thr Val Pro Gly
 35 40 45
 Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Glu Pro Gly Val Asp Tyr
 50 55 60
 Thr Ile Thr Val Tyr Ala Val Thr Pro His His Gly His Phe Asp Leu
 65 70 75 80
 Glu Leu Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 67
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 67
 Val Ser Asp Val Pro Arg Asp Leu Glu Gly Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Arg Lys Asp Arg Val Ser Ser Arg Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Ile Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Ala Tyr Val Val Thr Pro His His Gly
 65 70 75 80
 His Phe Asp Leu Glu Leu Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 68
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 68
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp His Met Ala Thr Pro Asn Thr Arg Tyr Tyr
 20 25 30
 Arg Thr Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Asn Thr Asn Thr Val Tyr Ala Val Thr Ser Val Asn
 65 70 75 80
 Ala Phe Pro Tyr Glu Gly Met Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90 95

<210> 69
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 69
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Ala Thr
 1 5 10 15
 Ser Leu Leu Ser Ser Trp Tyr Leu Cys Thr Gly Asn Asn Arg Asp Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Ala Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Ile Pro Ser Arg Cys Met Leu Ser Leu Ala Ser Leu
 65 70 75 80
 Met Ser Thr Arg Asn Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 70
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 70
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Arg Thr Pro Ala Ser Pro His Gly Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Glu Glu Phe
 35 40 45
 Thr Val Pro Leu Leu Trp Pro Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Ala Ile Thr Val Tyr Ala Val Thr Pro Thr His Met
 65 70 75 80
 Leu Lys Pro Leu Ser Met Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 71
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 71
 Ile Ser Asp Val Pro Arg Asp Met Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Asn Met Ala His Pro His Asp Arg Asn Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Ser
 35 40 45
 Thr Val Pro Arg Tyr Leu Ser Thr Ala Thr Ile Ser Gly Pro Lys Arg
 50 55 60
 Val Asp Tyr Thr Ile Ile Val Tyr Ala Val Asn Gln Pro Thr Val Ser
 65 70 75 80
 Ala His Asn His Ala Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 72
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 72
 Val Ser Asp Val Pro Arg Asp Leu Lys Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Phe Pro Asp Asn Ala Thr Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Leu Phe Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro Gly
 50 55 60
 Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ser His Arg Asp Tyr
 65 70 75 80
 His Ser Thr Gly Arg Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 73
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 73
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Met Leu Leu Arg Asp Asp Arg Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Thr Phe His Pro Thr Ala Thr Ile Ser Gly Arg Lys Pro
 50 55 60
 Gly Val Asp Tyr Asn Thr Ile Thr Val Tyr Ala Val Thr Gln Ser Thr
 65 70 75 80
 Asn Gly Asn Arg Asn Asp Phe Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90 95

<210> 74
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 74
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Ser Pro Pro Asn Asp Ala His Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Asn Thr Val Tyr Ala Val Thr Asp Gln Gln Ser
 65 70 75 80
 Tyr Thr Tyr Tyr Ser Asn Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 75
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 75
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Val Ile Ser Trp Ser Pro Pro Asn Asp Ala His Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Asn Thr Val Tyr Ala Val Thr Asp Gln Gln Ser
 65 70 75 80
 Tyr Thr Tyr Tyr Ser Asn Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 76
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 76
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Ser Pro Pro Asn Asp Ala His Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Thr Met Pro Thr Asn Trp Arg
 65 70 75 80
 Phe Pro His Arg Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 77
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 77
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Gln Leu Ile Ser Trp Thr Thr Arg His Ser Pro Val Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Met Pro Thr Asn
 65 70 75 80
 Trp Arg Phe Pro His Arg Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 78
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 78
 Val Ser Asp Val Pro Arg Asp Leu Glu Ile Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Gly Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Thr Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ser Asn Val Gly
 65 70 75 80
 Arg Leu Asp Thr Arg Tyr Pro Ile Ser Thr Asn Tyr Arg Thr
 85 90

<210> 79
 <211> 93
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 17, 30, 34
 <223> Xaa = Any Amino Acid

<400> 79
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Xaa Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Xaa Tyr Tyr
 20 25 30
 Arg Xaa Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Ile Ser Gly Leu Lys Pro Gly
 50 55 60

Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ser	Asn	Val	Gly	Arg
65					70					75					80
Leu	Asp	Thr	Arg	Tyr	Pro	Ile	Phe	Ile	Asn	Tyr	Arg	Thr			
				85					90						

<210> 80
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 80															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr				
65					70					75					

<210> 81
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 81															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 82
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 82															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Cys	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp

65		70		75		80							
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr
				85					90				

<210> 83
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 83

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Ser	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Pro	Thr	His	Asn
65					70					75					80
Trp	Asn	Asp	Gln	Thr	Arg	Ser	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 84
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 84

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Thr	Ser	Asn	Pro	Pro	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Gly	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ala	Gln	Thr	Gly
65					70					75					80
Tyr	His	Leu	His	Asp	Lys	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 85
 <211> 93
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 28, 51, 82
 <223> Xaa = Any Amino Acid

<400> 85

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Pro	Thr	Ser
1				5					10					15	
Arg	Leu	Ile	Ser	Trp	Arg	Pro	Gly	Arg	Thr	Tyr	Xaa	Arg	Tyr	Tyr	Arg

			20					25				30			
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	Thr
		35					40					45			
Val	Pro	Xaa	Trp	Ala	Asn	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro	Gly
	50					55					60				
Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Phe	Pro	Pro	Gly	Tyr
65					70					75					80
Pro	Xaa	Thr	Glu	Met	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr			
				85					90						

<210> 86
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 86															
Ile	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Arg	Arg	Trp	Pro	His	Phe	Asp	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Thr	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asn	Pro	Leu	Ser
65					70					75					80
Pro	Thr	Thr	Leu	His	Pro	Pro	Ile	Asn	Tyr	Arg	Thr				
				85					90						

<210> 87
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 87															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Lys	Pro	Arg	Thr	Asn	Thr	Arg	Tyr	Tyr	
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Gly	Thr	Ile	Ala	Thr	Ile	Asn	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Leu	Gly	Thr	Gly
65					70					75					80
Val	Tyr	Thr	Arg	Ala	Gln	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 88
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 88															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	

Ser	Gln	Leu	Ile	Ser	Trp	Pro	Phe	Gly	Trp	Tyr	Pro	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Arg	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	His	Phe	Pro	Glu
65					70					75					80
Ser	Arg	Arg	Pro	Ala	Lys	Pro	Met	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 89
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	His	Thr	Glu	Arg	Ser	Phe	Pro	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Gly	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Glu	His	Tyr	Arg
65					70					75					80
Asp	Thr	Gly	Thr	Gly	His	Pro	Ile	Pro	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 90
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	His	Thr	Glu	Arg	Ser	Phe	Pro	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Gly	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Glu	His	Tyr	Arg
65					70					75					80
Asp	Thr	Gly	Thr	Gly	His	Pro	Ile	Pro	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 91
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5					10					15		
Ser	Gln	Leu	Ile	Ser	Trp	Lys	Ser	His	Thr	Phe	His	Pro	Arg	Tyr	Tyr	
			20					25					30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	
		35					40					45				
Thr	Val	Pro	Pro	Trp	Ala	Ser	Thr	Ala	Ala	Ile	Ser	Gly	Leu	Lys	Pro	
		50				55					60					
Gly	Ala	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Leu	Asn	Arg	Ser	
65					70					75					80	
Ser	Pro	Asn	Ser	Ala	Arg	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr			
				85					90							

<210> 92
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	
1				5					10					15		
Ser	Leu	Leu	Ile	Ser	Trp	Arg	Pro	Gln	Val	Val	Ser	Thr	Arg	Tyr	Tyr	
			20					25					30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	
		35					40					45				
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro	
		50				55					60					
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asn	His	Lys	Ala	
65					70					75					80	
Asn	His	His	Asp	Ala	Glu	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr			
				85					90							

<210> 93
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	
1				5					10					15		
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Thr	Ser	Asn	His	Pro	Arg	Tyr	Tyr	
			20					25					30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	
		35					40					45				
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Gly	Gly	Leu	Lys	Pro	
		50				55					60					
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Thr	Thr	Asn	Glu	
65					70					75					80	
Asp	His	Val	Tyr	Ala	Leu	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Ile			
				85					90							

<210> 94
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 94

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Leu
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 95
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Gly	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Met	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 96
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 40
 <223> Xaa = Any Amino Acid

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Asp	Thr	His	Asn	Ala	Tyr	Asn	Gly	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Xaa	Gly	Asn	Ser	Pro	Val	Arg	Glu	Phe
		35					40					45			
Thr	Val	Pro	His	Pro	Glu	Val	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Asp	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asn	His	His	Met
65					70					75					80
Pro	Leu	Arg	Ile	Phe	Gly	Pro	Ile	Ser	Ile	Asn	His	Arg	Thr		
				85					90						

<210> 97
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 13, 21
 <223> Xaa = Any Amino Acid

<400> 97
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Xaa Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Xaa Trp Thr Arg Thr Asn Ala Asn Thr Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Ala Pro Asn Asn Pro Pro Thr Ala Thr Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Asp Gly Ser
 65 70 75 80
 Arg His Met Leu Thr Lys Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 98
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 98
 Leu Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Ala Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Asp Lys Ser Asp
 65 70 75 80
 Thr Tyr Lys Tyr Asp Asp Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 99
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 99
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Leu
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60

Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	His	Arg	Thr		
				85					90						

<210> 100
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Gly	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	His
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 101
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Glu	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Met	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 102
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro

50		55		60											
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Thr	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 103
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 103
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Ala Asp Lys Ser Asp
65 70 75 80
Thr Tyr Lys Tyr Asp Asp Pro Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 104
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 104
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Asp Lys Ser Asp
65 70 75 80
Thr Tyr Lys Tyr Asp Asp Pro Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 105
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 105
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Cys Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45

Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
50						55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Gln	Arg	Asp
65					70					75					80
Thr	Tyr	Arg	Tyr	Asp	Asp	Pro	Ile	Ser	Thr	Asn	Cys	Arg	Thr		
				85					90						

<210> 106
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Asn	Ile	Tyr	Pro	Ile	Ala	Arg	Tyr	Tyr
		20					25						30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
	35					40						45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Ala	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 107
 <211> 92
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 27
 <223> Xaa = Any Amino Acid

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Ala	Thr
1				5					10					15	
Ser	Gln	Leu	Ile	Ser	Trp	Pro	Trp	Pro	Ser	Xaa	Pro	Thr	Arg	Tyr	Tyr
		20					25						30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Glu	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
	35					40						45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Thr	Ala	Thr	Ile	Ser	Gly	Ile	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Ala	Val	Tyr	Ala	Val	Thr	Met	Pro	Glu	Arg
65					70					75					80
Lys	Tyr	Asp	Lys	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr				
				85					90						

<210> 108
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 108

Val	Ser	Asp	Val	Ser	Arg	Asp	Leu	Glu	Ala	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Asn	Pro	Asn	Arg	Ser	Phe	Ala	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Gly	Gly	Leu	Lys	Pro
	50					55					60				
Arg	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ala	Gln	Thr	Gly
65					70					75					80
His	His	Leu	His	Asp	Lys	Ser	Ile	Pro	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 109
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Gly	Arg	Thr	Tyr	Ser	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Ser
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Asn	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Phe	Pro	Pro	Gly
65					70					75					80
Tyr	Pro	Leu	Thr	Glu	Met	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 110
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Ser
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Gly	Arg	Thr	Tyr	Ser	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Asn	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Ala	Val	Tyr	Ala	Val	Thr	Phe	Pro	Thr	Gly
65					70					75					80
Tyr	Pro	Leu	Thr	Glu	Met	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 111
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 111
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Arg Pro Gly Arg Thr Tyr Ser Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Pro Trp Ala Asn Thr Ala Thr Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Asp Tyr Thr Ile Thr Ala Tyr Ala Val Thr Tyr Thr His Ser
65 70 75 80
Thr Pro Met Gln Asp Glu Pro Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 112
<211> 94
<212> PRT
<213> Homo sapiens

<400> 112
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Asp Asn Ser Arg Pro Asn Thr Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Pro Trp Gly Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Lys Tyr Thr Ile Thr Val Tyr Ala Val Thr Thr Ser Glu Cys
65 70 75 80
His Lys Leu Ser Ser Thr Ser Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 113
<211> 91
<212> PRT
<213> Homo sapiens

<400> 113
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Leu Leu Ile Ser Trp Thr Arg Thr Asn Ala Ser Thr Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Asn Phe Trp Trp Ile Ser Gly Leu Lys Pro Gly Val Asp
50 55 60
Tyr Thr Ile Thr Val Tyr Ala Val Ala Ser Pro Asp Glu Thr Ser Ala
65 70 75 80
Tyr Ser Glu Pro Ile Ser Ile Asn Tyr Arg Thr
85 90

<210> 114
<211> 92
<212> PRT
<213> Homo sapiens

<220>
 <221> VARIANT
 <222> 3, 18, 23
 <223> Xaa = Any Amino Acid

<400> 114
 Val Ser Xaa Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Xaa Leu Ile Ser Trp Xaa Pro Arg Ser His His Asp Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Gly Thr Ile Ala Thr Ile Asp Gly Leu Lys Pro
 50 55 60
 Gly Val Gly Tyr Thr Val Thr Val Tyr Ala Val Thr Asp Asn Pro Asn
 65 70 75 80
 Ser Ala Lys Ala Gln His Pro Ile Asn Ser Arg Thr
 85 90

<210> 115
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 115
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Val Ala Thr Pro Thr
 1 5 10 15
 Ser Gln Leu Ile Ser Trp Met Thr Pro His Asn His Val Arg Tyr Tyr
 20 25 30
 Gly Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Ser
 35 40 45
 Thr Val Pro Thr Gly Asn Ala Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro His His Gly
 65 70 75 80
 His Phe Asp Leu Glu Pro Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 116
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 116
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Ser Thr
 1 5 10 15
 Gly Leu Leu Ile Ser Trp Arg Thr Pro Ala Ser Pro His Gly Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Glu Glu Phe
 35 40 45
 Thr Val Pro Leu Leu Trp Pro Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Pro Thr His Met
 65 70 75 80
 Leu Lys Pro Gln Ser Met Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 117
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 117
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Ser Pro Pro Asn Asp Ala His Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Lys Thr Gly Gly Asp Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ser Val Val Tyr Ala Val Thr Asp Gln Gln Ser
 65 70 75 80
 Tyr Thr Tyr Tyr Ser Asn Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 118
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 28
 <223> Xaa = Any Amino Acid

<400> 118
 Val Ser Asp Val Pro Ser Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Glu Gln Ser Pro Thr Xaa Gly Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Arg Lys Pro
 50 55 60
 Gly Ala Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ile Glu Lys Asp
 65 70 75 80
 Arg Ile Pro Leu Phe Gly Pro Ile Ser Ile Ser Tyr Arg Thr
 85 90

<210> 119
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 119
 Val Ser Asp Val Pro Ser Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Glu Gln Ser Pro Thr Tyr Gly Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Arg Lys Pro
 50 55 60

Gly	Ala	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ile	Glu	Lys	Asp
65					70					75					80
Arg	Ile	Pro	Leu	Phe	Gly	Pro	Ile	Ser	Ile	Ser	Tyr	Arg	Thr		
				85					90						

<210> 120
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 28
 <223> Xaa = Any Amino Acid

Val	Ser	Asp	Val	Pro	Ser	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Glu	Gln	Ser	Pro	Thr	Xaa	Gly	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	Ile	Ser	Gly	Arg	Lys	Pro
	50					55					60				
Gly	Ala	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ile	Glu	Lys	Asp
65					70					75					80
Arg	Ile	Pro	Leu	Phe	Gly	Pro	Ile	Ser	Ile	Ser	Tyr	Arg	Thr		
				85					90						

<210> 121
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Pro	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Asp	Thr	His	Asn	Ala	Tyr	Asn	Gly	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Ser	Ser	Pro	Ala	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	His	Pro	Glu	Val	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Asp	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ile	His	His	Met
65					70					75					80
Pro	Leu	Arg	Ile	Phe	Gly	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 122
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	

Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25				30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Glu	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Val	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 123
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Arg	Tyr	Tyr
		20						25				30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Glu	Ser	Asp
65					70					75					80
Thr	Tyr	Lys	Tyr	Asp	Asp	Pro	Val	Ser	Thr	Asn	Tyr	Arg	Thr		
				85					90						

<210> 124
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Asn	Arg	Ser	Gly	Leu	Gln	Ser	Gly	Tyr	Tyr
		20						25				30			
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
		50				55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Pro	Asn	Val	Gly
65					70					75					80
Arg	Leu	Asp	Thr	Arg	Tyr	Pro	Ile	Ser	Ile	Asp	Cys	Arg	Thr		
				85					90						

<210> 125
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT

<222> 86
 <223> Xaa = Any Amino Acid

<400> 125
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Asn Arg Ser Gly Leu Gln Ser Arg Tyr Tyr
 20 25 30
 Arg Thr Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Ser Asn Val Gly
 65 70 75 80
 Arg Leu Asp Thr Arg Xaa Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 126
 <211> 94
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 75
 <223> Xaa = Any Amino Acid

<400> 126
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Arg Thr Met Pro Val Thr Ala Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asp Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Ala Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Ala Asp Tyr Thr Ile Thr Val Tyr Ala Xaa Thr Ser Ala Thr Pro
 65 70 75 80
 Ser Arg Pro Asn Val His Pro Ile Ser Ile Asn Leu Thr Thr
 85 90

<210> 127
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 127
 Val Ser Asp Val Pro Gly Asp Leu Glu Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Gly Trp Ser Met Thr Pro Asn Trp Pro Arg Tyr Tyr
 20 25 30
 Arg Ile Ala Tyr Gly Glu Thr Gly Gly Asp Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Ile Ile Gly Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr His Arg Asp Thr
 65 70 75 80

Pro Ile Ser Ile Asn Tyr Arg Thr
85

<210> 128
<211> 90
<212> PRT
<213> Homo sapiens

<400> 128
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Ile
1 5 10 15
Ser Gln Leu Thr Ser Trp Gln Pro Gln Pro Asn Gly Ser Arg Tyr Tyr
20 25 30
Arg Ile Ala Tyr Gly Glu Thr Gly Asn Ser Pro Val Arg Glu Phe
35 40 45
Thr Val Pro Ala Arg Glu Gln Thr Ala Thr Ser Gly Leu Lys Pro Gly
50 55 60
Val Asp Tyr Ala Ile Thr Val Tyr Ala Ala Thr His Gly Lys Pro Pro
65 70 75 80
His Ile His Phe Thr Ile Asn Tyr Arg Thr
85 90

<210> 129
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> 2, 9, 12, 22
<223> Xaa = Any Amino Acid

<400> 129
Val Xaa Asp Val Pro Arg Asp Leu Xaa Val Val Xaa Ala Thr Pro Thr
1 5 10 15
Ser Leu Leu Ile Ser Xaa Arg Ser Gly Asn Arg Thr Thr Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Asp Thr Gly Asn Ser Pro Val Gln Glu Phe
35 40 45
Thr Met Pro Pro Trp Ala Thr Val Ala Ala Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Thr His Asn Ser
65 70 75 80
Thr Ala Gln Pro Glu Tyr Pro Ile Pro Phe Asn Arg Arg Thr
85 90

<210> 130
<211> 94
<212> PRT
<213> Homo sapiens

<400> 130
Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr
1 5 10 15
Ser Arg Leu Ile Ser Trp Arg Pro Gly Arg Thr Tyr Ser Arg Tyr Tyr
20 25 30

Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Pro	Trp	Ala	Asn	Thr	Ala	Thr	Ile	Ser	Cys	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Ala	Phe	Pro	Pro	Gly
65					70					75					80
Tyr	Pro	Leu	Thr	Glu	Met	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 131
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Gly	Arg	Ala	Tyr	Ser	Arg	Tyr	Phe
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
	35						40					45			
Thr	Val	Pro	Pro	Trp	Ala	Asn	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Ala	Val	Tyr	Ala	Val	Thr	Phe	Pro	Pro	Arg
65					70					75					80
Tyr	Pro	Leu	Thr	Glu	Met	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Ala		
				85					90						

<210> 132
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Gly	Arg	Thr	Tyr	Ser	Arg	Tyr	Tyr
		20						25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Ala	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
	35						40					45			
Thr	Val	Pro	Pro	Trp	Ala	Ser	Ile	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Asp	Lys	Ser	Gly
65					70					75					80
Thr	Tyr	Arg	Tyr	Asp	Asp	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
				85					90						

<210> 133
 <211> 94
 <212> PRT
 <213> Homo sapiens

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Arg	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Arg	Leu	Ile	Ser	Trp	Arg	Pro	Ala	Ser	Asn	Pro	Ala	Arg	Tyr	Tyr

			20					25				30				
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	
		35					40					45				
Thr	Val	Pro	Pro	Trp	Ala	Ser	Val	Ala	Thr	Ile	Gly	Gly	Leu	Lys	Pro	
	50					55					60					
Gly	Val	Asp	Tyr	Thr	Val	Thr	Val	Tyr	Ala	Val	Thr	Ala	Gln	Thr	Gly	
65					70					75					80	
His	Arg	Leu	His	Asp	Lys	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr			
				85					90							

<210> 134
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 134

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Ser	
1				5					10					15		
Leu	Leu	Ile	Ser	Trp	Arg	Pro	Pro	Ala	Asp	Leu	Asn	Arg	Tyr	Tyr	Arg	
			20					25					30			
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	Thr	
		35				40						45				
Val	Pro	Pro	Trp	Gly	Thr	Val	Ala	Thr	Val	Asn	Gly	Leu	Lys	Pro	Gly	
	50					55					60					
Val	Gly	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	His	Arg	Asp	Thr	Pro	
65					70					75					80	
Ile	Ser	Ile	Asn	Tyr	Arg	Ala										
				85												

<210> 135
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 135

Val	Thr	Asp	Val	Pro	Arg	Gly	Leu	Lys	Ile	Val	Ala	Ala	Thr	Pro	Ser	
1				5					10					15		
Leu	Leu	Ile	Ser	Trp	Arg	Asn	Ala	Lys	Asp	Pro	Gly	Arg	Tyr	Tyr	Arg	
			20					25					30			
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Ser	Ser	Pro	Val	Gln	Glu	Phe	Thr	
		35				40						45				
Val	Pro	Pro	Trp	Gly	Thr	Ile	Ala	Ala	Ile	Asn	Gly	Leu	Lys	Pro	Gly	
	50					55					60					
Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Ala	Thr	Asn	Pro	Gly	
65					70					75					80	
Pro	Thr	Gln	His	Arg	Pro	Ile	Pro	Ile	Asn	Tyr	Arg	Thr				
				85					90							

<210> 136
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 136

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Asp	Pro	His	
1				5					10					15		

Gln Pro Leu Ile Cys Trp Ala Ser Pro Pro Met Trp Cys Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Ser Gly Gly Asn Ser Pro Val Gln Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Ala Ala Ala Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val His Ala Val Thr Asp Glu Ser Trp
 65 70 75 80
 Ser Asp Arg Ser Met Asp Pro Ile Ser Ile Asn Cys Arg Thr
 85 90

<210> 137
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 137
 Val Ser Asp Val Pro Arg Asp Leu Lys Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Arg Leu Ile Ser Trp Thr His Asp Asn Val Pro Ala Arg Tyr Tyr
 20 25 30
 Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Leu
 35 40 45
 Thr Val Pro Pro Trp Ala Ser Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Leu Tyr Thr Gly
 65 70 75 80
 Asn His Arg Pro Glu His Pro Ile Ser Ile Asn Tyr Arg Thr
 85 90

<210> 138
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 138
 Val Ser Asp Val Pro Arg Asp Pro Val Val Val Ala Ala Thr Pro Thr
 1 5 10 15
 Ser Leu Leu Ile Ser Trp Tyr Arg His Thr Tyr Arg Asp Arg Tyr Tyr
 20 25 30
 Arg Val Thr Tyr Gly Glu Thr Arg Gly Asn Ser Pro Ile Arg Glu Phe
 35 40 45
 Thr Val Pro Pro Trp Ala Thr Ile Ala Thr Ile Ser Gly Leu Lys Pro
 50 55 60
 Gly Val Asp Tyr Thr Ile Ala Val Tyr Ala Val Thr Asp Ala Gly Tyr
 65 70 75 80
 Asp Val His Thr Lys Arg Pro Ile Ser Ile Asn Arg Thr
 85 90

<210> 139
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 139
 Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro Thr

1		5		10		15									
Gly	Leu	Leu	Ile	Ser	Trp	Arg	Asn	Asn	Gln	Tyr	Thr	Pro	Arg	His	Tyr
			20					25					30		
Gly	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Lys	Ser	Pro	Val	Gln	Glu	Phe
		35					40					45			
Thr	Val	Pro	Glu	Leu	Asn	Pro	Thr	Ala	Thr	Ile	Ser	Arg	Leu	Lys	Pro
	50					55					60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Gln	Asn	Gly	Thr
65					70					75					80
Pro	Arg	Val	Ile	Tyr	Gly	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
			85						90						

<210> 140
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 140															
Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Asn	Val	Pro	Ile	Ile	Arg	Tyr	Tyr	Arg	Ile	Thr	Tyr	Gly
			20					25					30		
Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	Thr	Val	Pro	Ala	Pro
		35					40					45			
Lys	Ala	Ile	Ala	Thr	Thr	Ser	Gly	Leu	Lys	Pro	Gly	Val	Asp	Tyr	Thr
	50					55					60				
Ile	Thr	Val	Tyr	Gly	Val	Thr	Ser	His	Arg	Asn	His	Phe	His	Val	Glu
65					70					75					80
Thr	Pro	Ile	Ser	Ile	Asn	Tyr	Gln	Ala							
				85											

<210> 141
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 141															
Asp	Ala	Pro	Ala	Val	Thr	Val	Gly	Ser	Lys	Ser	Gly	Arg	Gly	Asp	Ser
1				5					10					15	
Pro	Ala	Ser	Ser	Lys											
			20												

<210> 142
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 142															
Ala	Ser	Pro	Pro	Met	Trp	Cys	Pro	Trp	Ala	Thr	Glu	Tyr	Leu	Pro	Glu
1				5					10					15	
Trp	Asn	Met	Thr	Gln											
			20												

<210> 143
 <211> 21

<212> PRT
<213> Homo sapiens

<400> 143
Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Asp Lys Ser Asp Thr
1 5 10 15
Tyr Lys Tyr Asp Asp
20

<210> 144
<211> 21
<212> PRT
<213> Homo sapiens

<400> 144
Arg Pro Thr Ser Asn Pro Pro Pro Trp Ala Ser Ala Gln Thr Gly His
1 5 10 15
His Leu His Asp Lys
20

<210> 145
<211> 21
<212> PRT
<213> Homo sapiens

<400> 145
His Thr Glu Arg Ser Phe Pro Pro Trp Gly Ser Glu His Tyr Arg Asp
1 5 10 15
Thr Gly Thr Gly His
20

<210> 146
<211> 21
<212> PRT
<213> Homo sapiens

<400> 146
Thr Thr Arg His Ser Pro Val Pro Trp Ala Thr Met Pro Thr Asn Trp
1 5 10 15
Arg Phe Pro His Arg
20

<210> 147
<211> 21
<212> PRT
<213> Homo sapiens

<400> 147
Arg Pro Asn Pro Arg Leu Ser Gly Leu Phe Ser Pro Lys Glu Thr Ser
1 5 10 15
Asn Ile Phe Ile Ala
20

<210> 148

<211> 21
<212> PRT
<213> Homo sapiens

<400> 148
Ser Pro Pro Asn Asp Ala His Gly Ser Lys Ser Asp Gln Gln Ser Tyr
1 5 10 15
Thr Tyr Tyr Ser Asn
20

<210> 149
<211> 21
<212> PRT
<213> Homo sapiens

<400> 149
Arg Thr Pro Ala Ser Pro His Leu Leu Trp Pro Pro Thr His Met Leu
1 5 10 15
Lys Pro Gln Ser Met
20

<210> 150
<211> 21
<212> PRT
<213> Homo sapiens

<400> 150
Tyr Arg His Thr Tyr Arg Asp Pro Trp Ala Thr Asp Thr Gly Tyr Asp
1 5 10 15
Val His Thr Lys Arg
20

<210> 151
<211> 21
<212> PRT
<213> Homo sapiens

<400> 151
Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Ser Asn Val Gly Arg
1 5 10 15
Leu Asp Thr Arg Tyr
20

<210> 152
<211> 21
<212> PRT
<213> Homo sapiens

<400> 152
Asp Thr His Asn Ala Tyr Asn His Pro Glu Val Asn His His Met Pro
1 5 10 15
Leu Arg Ile Phe Gly
20

<210> 153
<211> 21
<212> PRT
<213> Homo sapiens

<400> 153
Arg Pro Thr Ser Asn Pro Pro Pro Trp Ala Ser Pro Val Tyr Pro Met
1 5 10 15
His Ser Met Leu Ser
20

<210> 154
<211> 21
<212> PRT
<213> Homo sapiens

<400> 154
Arg Asn Ile Tyr Pro Ile Ala Pro Trp Ala Ser Asp Lys Ser Asp Thr
1 5 10 15
Tyr Lys Tyr Asp Asp
20

<210> 155
<211> 21
<212> PRT
<213> Homo sapiens

<400> 155
Asn Arg Ser Gly Leu Gln Cys Pro Trp Ala Ser Asp Gln Arg Asp Thr
1 5 10 15
Tyr Lys Tyr Asp Asp
20

<210> 156
<211> 21
<212> PRT
<213> Homo sapiens

<400> 156
Arg Pro Gly Arg Thr Tyr Ser Pro Trp Ala Asn Phe Pro Thr Gly Tyr
1 5 10 15
Pro Leu Thr Glu Met
20

<210> 157
<211> 21
<212> PRT
<213> Homo sapiens

<400> 157
Arg Pro Gly Arg Thr Tyr Ser Pro Trp Ala Asn Phe Pro Pro Gly Tyr
1 5 10 15
Pro Leu Thr Glu Met
20

<210> 158
<211> 21
<212> PRT
<213> Homo sapiens

<400> 158
Met Thr Pro His Asn His Val Thr Gly Asn Ala Pro His His Gly His
1 5 10 15
Phe Asp Leu Glu Pro
20

<210> 159
<211> 21
<212> PRT
<213> Homo sapiens

<400> 159
Thr Arg Thr Asn Ala Ser Thr Asn Phe Trp Trp Ser Pro Asp Glu Thr
1 5 10 15
Ser Ala Tyr Ser Glu
20

<210> 160
<211> 21
<212> PRT
<213> Homo sapiens

<400> 160
Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Asp Lys Ser Asp Thr
1 5 10 15
Tyr Lys Tyr Asp Asp
20

<210> 161
<211> 21
<212> PRT
<213> Homo sapiens

<400> 161
Arg Pro Gly Arg Thr Tyr Ser Pro Trp Ala Asn Tyr Thr His Ser Thr
1 5 10 15
Pro Met Gln Asp Glu
20

<210> 162
<211> 21
<212> PRT
<213> Homo sapiens

<400> 162
Arg Thr Pro Ala Ser Pro His Leu Leu Trp Pro Pro Thr His Met Leu
1 5 10 15
Lys Pro Gln Ser Met
20

<210> 163
<211> 21
<212> PRT
<213> Homo sapiens

<400> 163
Thr Arg Thr Asn Ala Asn Thr Asn Asn Pro Pro Pro Asp Gly Ser Arg
1 5 10 15
His Met Leu Thr Lys
20

<210> 164
<211> 21
<212> PRT
<213> Homo sapiens

<400> 164
Asp Asn Ser Arg Pro Asn Thr Pro Trp Gly Ser Thr Ser Glu Cys His
1 5 10 15
Lys Leu Ser Ser Thr
20

<210> 165
<211> 21
<212> PRT
<213> Homo sapiens

<400> 165
Asn Pro Asn Arg Ser Phe Ala Pro Trp Ala Ser Ala Gln Thr Gly His
1 5 10 15
His Leu His Asp Lys
20

<210> 166
<211> 15
<212> PRT
<213> Homo sapiens

<400> 166
Ser Met Thr Pro Asn Trp Pro Pro Trp Ala Ser His Arg Asp Thr
1 5 10 15

<210> 167
<211> 21
<212> PRT
<213> Homo sapiens

<400> 167
Asp Thr His Asn Ala Tyr Asn His Pro Glu Val Ile His His Met Pro
1 5 10 15
Leu Arg Ile Phe Gly
20

<210> 168

<211> 20
<212> PRT
<213> Homo sapiens

<400> 168
Ala Ser Pro Pro Met Trp Pro Trp Ala Thr Asp Glu Ser Trp Ser Asp
1 5 10 15
Arg Ser Met Asp
20

<210> 169
<211> 15
<212> PRT
<213> Homo sapiens

<400> 169
Arg Pro Pro Ala Asp Leu Asn Pro Trp Gly Thr His Arg Asp Thr
1 5 10 15

<210> 170
<211> 21
<212> PRT
<213> Homo sapiens

<400> 170
Glu Gln Ser Pro Thr Tyr Gly Gly Ser Lys Ser Ile Glu Lys Asp Arg
1 5 10 15
Ile Pro Leu Phe Gly
20

<210> 171
<211> 21
<212> PRT
<213> Homo sapiens

<400> 171
Arg Pro Gly Arg Thr Tyr Ser Pro Trp Ala Asn Phe Pro Pro Gly Tyr
1 5 10 15
Pro Leu Thr Glu Met
20

<210> 172
<211> 21
<212> PRT
<213> Homo sapiens

<400> 172
Arg Pro Gly Arg Thr Tyr Ser Pro Trp Ala Ser Asp Lys Ser Gly Thr
1 5 10 15
Tyr Arg Tyr Asp Asp
20

<210> 173
<211> 21

<212> PRT
<213> Homo sapiens

<400> 173
Tyr Arg His Thr Tyr Arg Asp Pro Trp Ala Thr Asp Ala Gly Tyr Asp
1 5 10 15
Val His Thr Lys Arg
20

<210> 174
<211> 21
<212> PRT
<213> Homo sapiens

<400> 174
Arg Thr Met Pro Val Thr Ala Pro Trp Ala Ser Ser Ala Thr Pro Ser
1 5 10 15
Arg Pro Asn Val His
20

<210> 175
<211> 21
<212> PRT
<213> Homo sapiens

<400> 175
Arg Pro Gly Arg Ala Tyr Ser Pro Trp Ala Asn Phe Pro Pro Arg Tyr
1 5 10 15
Pro Leu Thr Glu Met
20

<210> 176
<211> 21
<212> PRT
<213> Homo sapiens

<400> 176
Ser Pro Pro Asn Asp Ala His Gly Ser Lys Ser Asp Gln Gln Ser Tyr
1 5 10 15
Thr Tyr Tyr Ser Asn
20

<210> 177
<211> 16
<212> PRT
<213> Homo sapiens

<400> 177
Ile Ile Ala Pro Lys Ala Ser His Arg Asn His Phe His Val Glu Thr
1 5 10 15

<210> 178
<211> 21
<212> PRT

<213> Homo sapiens

<400> 178

Arg Asn Asn Gln Tyr Thr Pro Glu Leu Asn Pro Gln Asn Gly Thr Pro
1 5 10 15
Arg Val Ile Tyr Gly
20

<210> 179

<211> 21

<212> PRT

<213> Homo sapiens

<400> 179

Arg Pro Ala Ser Asn Pro Ala Pro Trp Ala Ser Ala Gln Thr Gly His
1 5 10 15
Arg Leu His Asp Lys
20

<210> 180

<211> 21

<212> PRT

<213> Homo sapiens

<400> 180

Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Pro Asn Val Gly Arg
1 5 10 15
Leu Asp Thr Arg Tyr
20

<210> 181

<211> 21

<212> PRT

<213> Homo sapiens

<400> 181

Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Asp Glu Ser Asp Thr
1 5 10 15
Tyr Lys Tyr Asp Asp
20

<210> 182

<211> 21

<212> PRT

<213> Homo sapiens

<400> 182

Thr His Asp Asn Val Pro Ala Pro Trp Ala Ser Leu Tyr Thr Gly Asn
1 5 10 15
His Arg Pro Glu His
20

<210> 183

<211> 21

<212> PRT
<213> Homo sapiens

<400> 183
Arg Ser Gly Asn Arg Thr Thr Pro Trp Ala Thr Thr His Asn Ser Thr
1 5 10 15
Ala Gln Pro Glu Tyr
20

<210> 184
<211> 21
<212> PRT
<213> Homo sapiens

<400> 184
Asn Arg Ser Gly Leu Gln Ser Pro Trp Ala Ser Ser Asn Val Gly Arg
1 5 10 15
Leu Asp Thr Arg Tyr
20

<210> 185
<211> 21
<212> PRT
<213> Homo sapiens

<400> 185
Arg Asn Ala Lys Asp Pro Gly Pro Trp Gly Thr Ala Thr Asn Pro Gly
1 5 10 15
Pro Thr Gln His Arg
20

<210> 186
<211> 94
<212> PRT
<213> Bovis taurus

<400> 186
Val Ser Asp Val Pro Arg Asp Leu Glu Val Ile Ala Ala Thr Pro Thr
1 5 10 15
Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr
20 25 30
Arg Ile Thr Tyr Gly Glu Thr Gly Gly Ser Ser Pro Val Gln Glu Phe
35 40 45
Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro
50 55 60
Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala Val Thr Gly Arg Gly Asp
65 70 75 80
Ser Pro Ala Ser Ser Lys Pro Val Ser Ile Asn Tyr Arg Thr
85 90

<210> 187
<211> 92
<212> PRT
<213> Rattus norvegicus

<400> 187

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Ile	Ala	Ser	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Glu	Pro	Ala	Val	Ser	Val	Arg	Tyr	Tyr	Arg
			20					25					30		
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	Thr
		35				40						45			
Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	Ile	Asn	Ile	Lys	Pro	Gly	Ala
	50					55					60				
Asp	Tyr	Thr	Ile	Thr	Leu	Tyr	Ala	Val	Thr	Gly	Arg	Gly	Asp	Ser	Pro
65					70					75					80
Ala	Ser	Ser	Lys	Pro	Val	Ser	Ile	Asn	Tyr	Gln	Thr				
				85					90						

<210> 188

<211> 92

<212> PRT

<213> Mus musculus

<400> 188

Val	Ser	Asp	Ile	Pro	Arg	Asp	Leu	Glu	Val	Ile	Ala	Ser	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Glu	Pro	Ala	Val	Ser	Val	Arg	Tyr	Tyr	Arg
			20					25					30		
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe	Thr
		35				40						45			
Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	Ile	Asn	Ile	Lys	Pro	Gly	Ala
	50					55					60				
Asp	Tyr	Thr	Ile	Thr	Leu	Tyr	Ala	Val	Thr	Gly	Arg	Gly	Asp	Ser	Pro
65					70					75					80
Ala	Ser	Ser	Lys	Pro	Val	Ser	Ile	Asn	Tyr	Lys	Thr				
				85					90						

<210> 189

<211> 40

<212> PRT

<213> Oryctolagus cuniculuc

<220>

<221> VARIANT

<222> 24

<223> Xaa = Any Amino Acid

<400> 189

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Ile	Ala	Ser	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Ile	Ser	Trp	Glu	Xaa	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr
			20				25						30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Asn								
		35					40								

<210> 190

<211> 92

<212> PRT

<213> Gallus gallus

<400> 190

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Asn	Thr	Ser	Pro	Thr	Ser
1				5					10					15	
Leu	Glu	Ile	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr	Arg
			20					25					30		
Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Ser	Ser	Pro	Val	Gln	Glu	Phe	Thr
		35					40					45			
Val	Pro	Gly	Thr	Met	Ser	Ala	Thr	Ile	Thr	Gly	Leu	Lys	Pro	Gly	Val
	50					55					60				
Asp	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Gly	Arg	Gly	Asp	Ser	Pro
65					70					75					80
Ala	Ser	Ser	Lys	Pro	Val	Thr	Val	Thr	Tyr	Lys	Thr				
				85					90						

<210> 191

<211> 93

<212> PRT

<213> *Xenopus laevis*

<400> 191

Val	Ser	Asp	Val	Pro	Thr	Asp	Leu	Glu	Val	Thr	Ser	Ser	Ser	Pro	Asn
1				5					10					15	
Thr	Leu	Thr	Ile	Ser	Trp	Glu	Ala	Pro	Ala	Val	Ser	Val	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Ser	Gln	Thr	Gly	Gly	Gly	Pro	Glu	Lys	Glu	Phe	Thr
		35					40					45			
Val	Pro	Gly	Thr	Ser	Asn	Thr	Ala	Thr	Ile	Arg	Gly	Leu	Asn	Pro	Gly
	50				55						60				
Val	Ser	Tyr	Thr	Ile	Thr	Val	Tyr	Ala	Val	Thr	Gly	Arg	Gly	Asp	Ser
65					70					75					80
Pro	Ala	Ser	Ser	Lys	Pro	Leu	Thr	Ile	Ile	His	Lys	Thr			
				85					90						

<210> 192

<211> 68

<212> PRT

<213> *Canis familiaris*

<400> 192

Ala	Asp	Ala	Pro	Ser	Leu	Phe	Leu	Ala	Thr	Thr	Pro	Ser	Leu	Leu	Val
1				5					10					15	
Ser	Trp	Gln	Pro	Ala	Ile	Thr	Gly	Tyr	Ile	Ile	Lys	Tyr	Gly	Ser	Glu
			20					25					30		
Val	Val	Pro	Gly	Val	Thr	Ala	Thr	Ile	Thr	Gly	Leu	Pro	Gly	Thr	Glu
		35					40					45			
Tyr	Thr	Ile	Gln	Val	Ile	Ala	Leu	Lys	Asn	Gln	Lys	Ser	Leu	Ile	Gly
	50					55					60				
Lys	Thr	Glu	Leu												
65															

<210> 193

<211> 67

<212> PRT

<213> *Equus caballis*

<400> 193

Ala	Asp	Ala	Pro	Ser	Leu	Phe	Leu	Ala	Thr	Thr	Pro	Ser	Leu	Leu	Ile
1				5					10					15	
Ser	Trp	Gln	Pro	Ala	Ile	Thr	Gly	Tyr	Ile	Ile	Lys	Tyr	Gly	Ser	Glu
			20					25					30		
Val	Val	Pro	Gly	Val	Thr	Ala	Thr	Ile	Thr	Gly	Leu	Pro	Gly	Thr	Glu
		35					40					45			
Tyr	Thr	Ile	Gln	Val	Ile	Ala	Ile	Lys	Asn	Gln	Lys	Ser	Leu	Ile	Gly
	50					55					60				
Lys	Thr	Glu													
65															

<210> 194
 <211> 70
 <212> PRT
 <213> Homo sapiens

Val	Ser	Pro	Pro	Lys	Asp	Leu	Val	Thr	Val	Thr	Thr	Val	Asn	Leu	Ala
1				5					10					15	
Trp	Asp	Met	Val	Thr	Tyr	Leu	Val	Val	Tyr	Thr	Pro	Thr	His	Glu	Gly
			20					25					30		
Gly	Glu	Met	Gln	Phe	Val	Pro	Gly	Asp	Gln	Thr	Ser	Thr	Ile	Ile	Gln
		35					40					45			
Leu	Pro	Gly	Val	Glu	Tyr	Phe	Ile	Arg	Val	Phe	Ala	Ile	Leu	Asn	Lys
	50					55					60				
Lys	Ser	Val	Ser	Ala	Val										
65					70										

<210> 195
 <211> 69
 <212> PRT
 <213> Sus scrofa

Val	Ser	Pro	Pro	Lys	Asp	Leu	Val	Thr	Val	Thr	Thr	Val	Asn	Leu	Ala
1				5					10					15	
Trp	Asp	Met	Val	Thr	Tyr	Leu	Ile	Val	Tyr	Thr	Pro	Thr	His	Glu	Gly
			20					25					30		
Glu	Met	Gln	Phe	Val	Pro	Gly	Asp	Gln	Thr	Ser	Thr	Thr	Ile	Arg	Leu
		35				40						45			
Pro	Gly	Val	Glu	Tyr	Phe	Ile	Arg	Val	Phe	Ala	Ile	Leu	Asn	Lys	Lys
	50					55					60				
Ser	Val	Ser	Ala	Val											
65															

<210> 196
 <211> 75
 <212> PRT
 <213> Mus musculus

Met	Asp	Gly	Pro	Gln	Asp	Leu	Val	Val	Ala	Val	Thr	Pro	Thr	Thr	Leu
1				5					10					15	
Asp	Leu	Ser	Trp	Pro	Gln	Ala	Val	Asp	Phe	Val	Val	Ser	Tyr	Val	Ser
			20					25					30		
Ala	Gly	Asn	Arg	Val	Leu	Val	Pro	Pro	Glu	Ala	Asp	Thr	Gln	Leu	Thr


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<210> 197
<211> 69
<212> PRT
<213> Homo sapiens
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<210> 198
<211> 44
<212> PRT
<213> Oryctolagus cuniculus
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<210> 199
<211> 66
<212> PRT
<213> Gallus gallus
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<210> 200
<211> 72

<212> PRT
<213> Homo sapiens

<400> 200

Leu	Ser	Asp	Leu	Leu	Tyr	Val	Thr	Ser	Met	Arg	Val	Lys	Trp	Asp	Ala
1				5					10					15	
Val	Gly	Ala	Ser	Gly	Tyr	Leu	Ile	Leu	Tyr	Ala	Pro	Leu	Thr	Glu	Gly
			20					25					30		
Leu	Ala	Gly	Glu	Lys	Glu	Met	Ile	Gly	Glu	Thr	His	Thr	Ile	Glu	Leu
		35				40						45			
Ser	Gly	Leu	Leu	Pro	Asn	Thr	Glu	Tyr	Thr	Val	Thr	Val	Tyr	Ala	Met
	50				55						60				
Phe	Gly	Ala	Ser	Asp	Val	Thr	Gly								
65					70										

as
conclude
<210> 201
<211> 117
<212> PRT
<213> Lama glama

<400> 201

Asp	Val	Gln	Leu	Gln	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Gly
1				5					10					15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Gly	Ser	Thr	Tyr
			20					25					30		
Asp	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Ser	Val
		35				40						45			
Ala	Ala	Ile	Asn	Trp	Asp	Ser	Ala	Arg	Thr	Tyr	Tyr	Ala	Ser	Ser	Val
	50				55						60				
Arg	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Lys	Thr	Val	Tyr
65				70				75						80	
Leu	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Thr	Cys
			85					90					95		
Gly	Ala	Gly	Glu	Gly	Gly	Thr	Trp	Asp	Ser	Trp	Gly	Gln	Gly	Thr	Gln
		100						105					110		
Val	Thr	Val	Ser	Ser											
			115												

<210> 202
<211> 94
<212> PRT
<213> Homo sapiens

<400> 202

Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr
1				5					10					15	
Ser	Leu	Leu	Phe	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr
			20					25					30		
Arg	Ile	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Leu	Val	Gln	Glu	Phe
		35				40						45			
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	Ile	Ser	Gly	Leu	Lys	Pro
	50				55						60				
Gly	Val	Asp	Tyr	Thr	Ile	Thr	Gly	Tyr	Ala	Val	Thr	Gly	Arg	Gly	Asp
65				70				75						80	
Ser	Pro	Ala	Ser	Ser	Lys	Pro	Ile	Ser	Ile	Asn	Tyr	Arg	Thr		
			85					90							